

TRADE

MARK



THAT
TRADE MARK
GUARANTEES
SUPERIOR QUALITY.

HELLER BROTHERS CO'S
GOODS

NEED BUT TO BE USED
TO BE APPRECIATED.



ESTABLISHED 1836

INCORPORATED 1899

ILLUSTRATED POCKET CATALOGUE
OF
HELLER BROTHERS CO.

MANUFACTURERS OF THE

CELEBRATED AMERICAN

Horse Rasps, Files, Farriers'
and Blacksmiths' Tools,

MACHINISTS' HAMMERS

AND

CLAY CRUCIBLE CAST STEEL.

NEWARK, N. J., U. S. A.

No. 10.

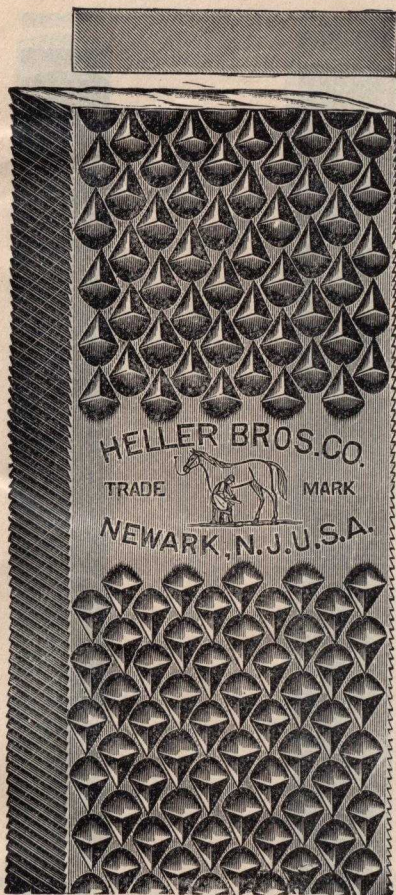
OUR RASPS, FILES, FARRIERS' TOOLS and MACHINISTS' HAMMERS are all made from OUR OWN PRODUCTION of SPECIAL REFINED CLAY CRUCIBLE TOOL STEEL and manufactured under machines of OUR OWN PATENTED CONSTRUCTION. These advantages, among others, added to our long practical experience of the past, enable us to produce a uniform quality, as well as a high grade of goods, which are acknowledged by all who have used them to be superior to any in the market.

The constantly increasing demand for our goods, year by year, for over half a century, is evidence that the dealer as well as the mechanic appreciates the fact, that the **"Best is the Cheapest."** It shall be our aim in the future, as it has been in the past, to maintain the high reputation our goods have attained, by improving, if possible, their standard of excellence.



No Horse Rasp is genuine unless it bears a facsimile of the above Trade-Mark.

Our goods are for sale by the Hardware and Iron Merchants throughout the world, but in case they have not got the particular tool you desire, write to us, giving the name and address of your dealer, and we will see that you are satisfactorily supplied.



Exact width, thickness and appearance of center section of 16-inch Horse Rasp and 18-inch Slim Horse Rasp showing trade mark as it appears on all genuine Heller Rasps, which is a guarantee of superiority as well as a guard against inferior rasps.



Horse Rasp.
Half File.
 $\frac{1}{2}$ doz. in box.



Tanged
Horse Rasp.
Half File.
 $\frac{1}{2}$ doz. in box.



Horse Rasp.
Quarter File.
 $\frac{1}{2}$ doz. in box.



Horse Rasp.
Beveled Edge.
 $\frac{1}{2}$ doz. in box.



**Half Round or
Hot Rasp.**
Half File.
 $\frac{1}{2}$ doz. in box.



Flat Wood Rasp.
 $\frac{1}{2}$ doz. in box.



**Half Round
Cabinet Rasp.**

$\frac{1}{2}$ doz. in box.



**Half Round
Shoe Rasp.**

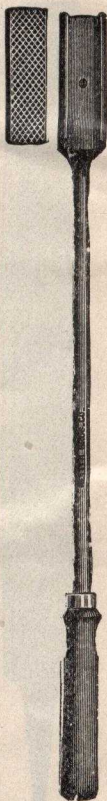
$\frac{1}{2}$ doz. in box.



No. 1.
20-Inch Horse
Tooth Rasp.
 Polished or
 Nickel-plated.
 One in box.



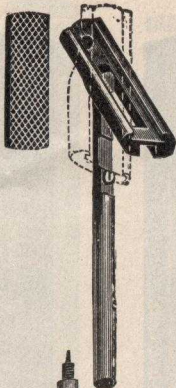
No. 2.
22-Inch Jointed
Horse Tooth Rasp.
 Polished or
 Nickel-plated.
 One in box.



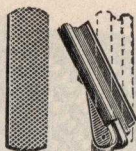
No. 3.
20-Inch Adjustable
Horse Tooth Rasp.
 Polished or
 Nickel-plated.
 One in box.



No. 4.



No. 5.



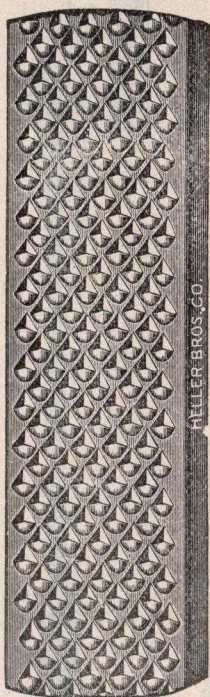
No. 6.

Patented
January 19, 1897.

**20-In. Adjustable
Jointed Horse
Tooth Rasp.**
Polished or
Nickel-plated.
One in box.

**20-In. Adjustable
Jointed Swivel
Horse Tooth Rasp.**
Polished or
Nickel-plated.
One in box.

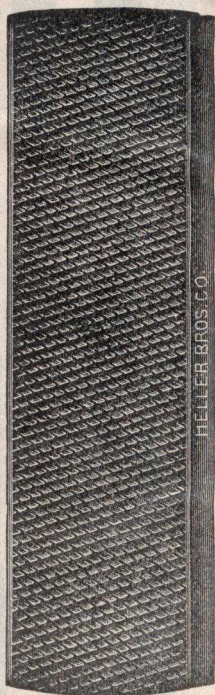
**16 to 22-Inch
Adjustable Jointed
Angular Horse
Tooth Rasp.**
Nickel-plated.
One in box.



No. 7.

Float**Rasp Cut.**

One doz. in box.

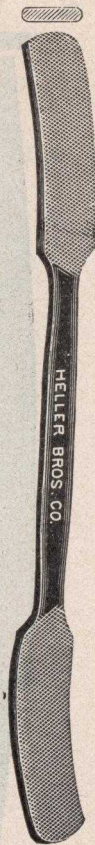


No. 7A.

Float**File Cut.**

One doz. in box.

Above floats are shown full size and fit our Nos. 3, 4, 5 and 6 adjustable horse tooth rasps. No. 7 has rasp cut one side and file cut opposite side. No. 7A has file cut both sides, and No. 7B has rasp cut both sides.



| | | | |
|---|---|--|---|
| <p>No. 8. 10-Inch Incisor Tooth File. $\frac{1}{2}$ doz. in box.</p> | <p>No. 9. 12-Inch Bent Incisor Tooth File. Three-quarter Rasp $\frac{1}{2}$ doz. in box.</p> | <p>No. 10. 12-Inch S-Shape Incisor Tooth File. $\frac{1}{2}$ doz. in box.</p> | <p>No. 11. 12-Inch Improved S-Shape Incisor Tooth File. $\frac{1}{2}$ doz. in box.</p> |
|---|---|--|---|



Flat
Bastard File.
Double Cut.
 $\frac{1}{2}$ doz. in box.



Hand
Bastard File.
Double Cut.
 $\frac{1}{2}$ doz. in box.



Pillar
Bastard File.
Double Cut.
 $\frac{1}{2}$ doz. in box.



**Warding
Bastard File.
Double Cut.
1 doz. in box.**



**Half Round
Bastard File.
Double Cut.
1/2 doz. in box.**



**Crossing
Bastard File.
Double Cut.
1/2 doz. in box.**



**Round
Bastard File.
Double Cut.**
½ doz. in box.



**Square
Bastard File.
Double Cut.**
½ doz. in box.



**Knife
Bastard File.
Double Cut.**
1 doz. in box.



**Feather Edge
Bastard File.
Double Cut.
1 doz. in box.**



**Three-Square
Bastard File.
Double Cut.
½ doz. in box.**



**Cabinet
Wood File.
Double Cut.
½ doz. in box.**



**Mill
Bastard File.
Single Cut.**
1 doz. in box.



**Cross Cut
Saw File.
Single Cut.**
1 doz. in box.



**Taper Saw File.
Single Cut.**
1 doz. in box.



**Slim Taper Saw
File.**
Single Cut.
1 doz. in box.



**Band
Saw File**
Single Cut.
1 doz. in box.



**Cant Saw
File.**
Single Cut.
1 doz. in box.



**Double-Ended
Taper Saw File.
Single Cut.**

1 doz. in box.



**Stave Saw File. Pit Saw File.
Single Cut.**

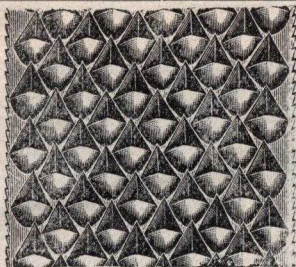
1 doz. in box.



**Pit Saw File.
Single Cut.**

1 doz. in box.

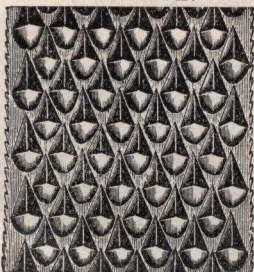
RASP CUT.



Actual width and cut of section of 14-inch Horse Rasp.

HORSE.

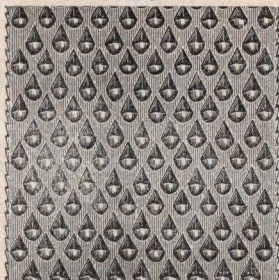
RASP CUT.



Actual width and cut of section of 14-inch Wood Rasp.

WOOD.

RASP CUT.



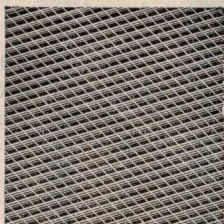
Actual width and cut of section of 14-inch Cabinet Rasp.

CABINET.

Above illustrations show the three different Rasp Cuts in most general use. The coarseness of the cut increases or diminishes in proportion with the size or length of the Rasp.

12 IN.

DOUBLE CUT.



Actual width and cut
of section of 12-inch
Flat Bastard File.

BASTARD.

12 IN.

DOUBLE CUT.

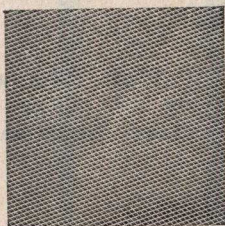


Actual width and cut
of section of 12-inch
Flat Second Cut File.

SECOND CUT.

12 IN.

DOUBLE CUT.



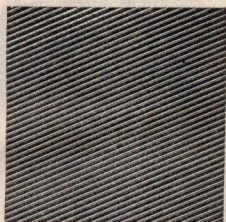
Actual width and cut
of section of 12-inch
Flat Smooth File.

SMOOTH.

Above illustrations show the three different File Cuts in most general use on Double Cut Files. The coarseness of the cut increases or diminishes in proportion with the size or length of the File.

12 IN.

SINGLE CUT.

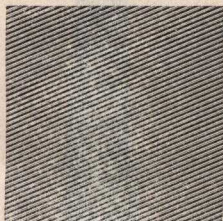


Actual width and cut
of section of 12-inch
Mill Bastard File.

BASTARD.

12 IN.

SINGLE CUT.

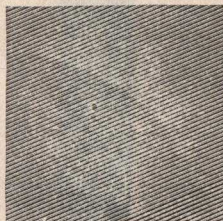


Actual width and cut
of section of 12-inch
Mill Second Cut File.

SECOND CUT.

12 IN.

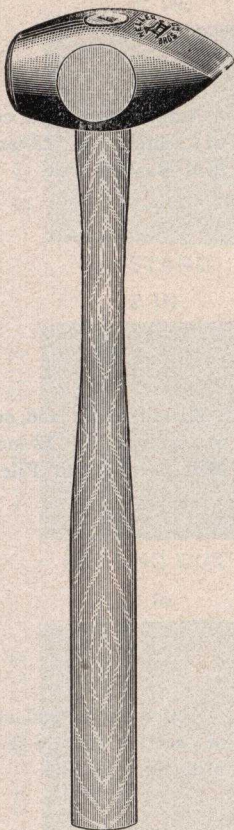
SINGLE CUT.



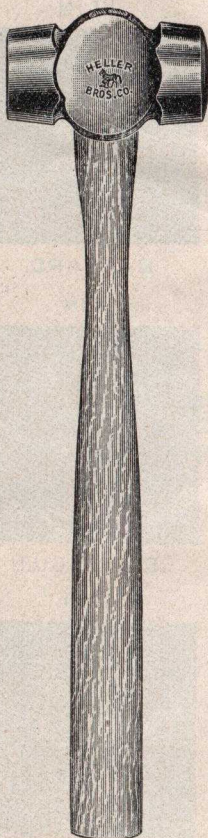
Actual width and cut
of section of 12-inch
Mill Smooth File.

SMOOTH.

Above illustrations show the three different File Cuts in most general use on Single Cut Files. The coarseness of the cut increases or diminishes in proportion with the size or length of the File.

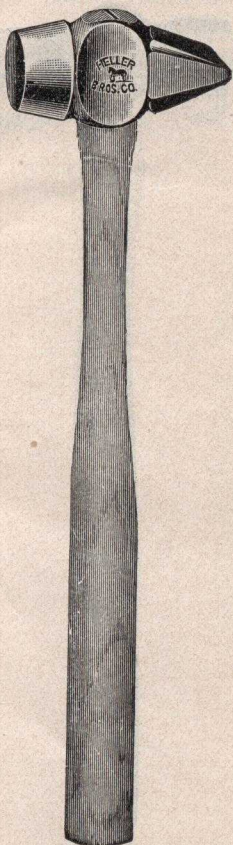


No. 60.

**Cat's Head, or
Turning Hammer.**2 to 3 lbs. With Handles
 $\frac{1}{4}$ doz. in box.

No. 61.

Rounding Hammer.2 to 3 lbs. With Handles
 $\frac{1}{4}$ doz. in box.

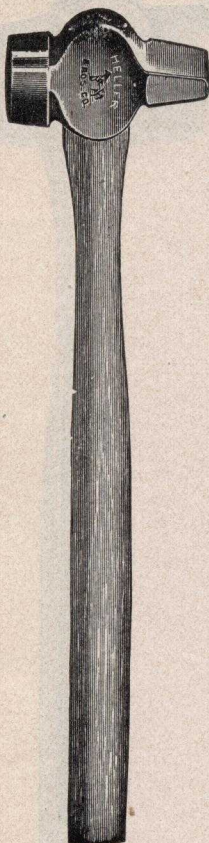


No. 62.

Fitting Hammer.

2 to 3 lbs. With Handles

$\frac{1}{4}$ doz. in box.

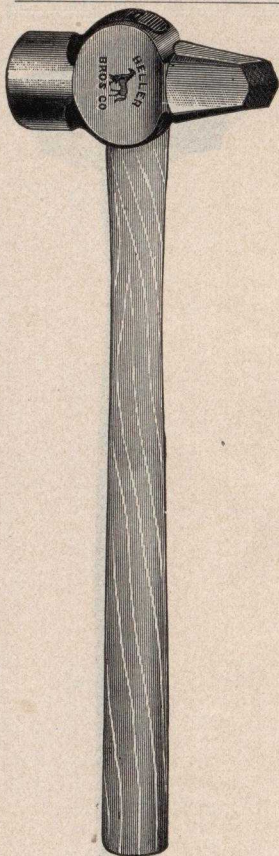


No. 67.

Sharpening Hammer.

$1\frac{3}{4}$ to $2\frac{3}{4}$ lbs with handles.

$\frac{1}{4}$ doz. in box.

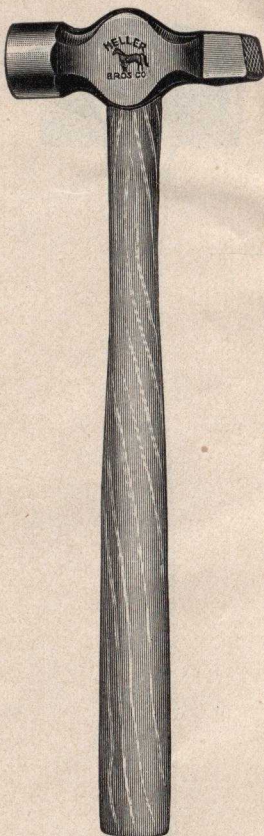


No. 68.

**Corrugated Pein
Sharpening Hammer.**

2 to 3 lbs. With Handles.

$\frac{1}{4}$ doz. in box.

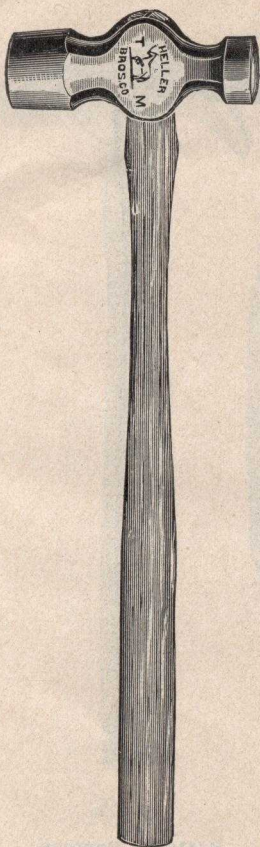


No. 70.

**Western Pattern Cor-
rugated Pein Sharpen-
ing Hammer.**

2 to 3 lbs.

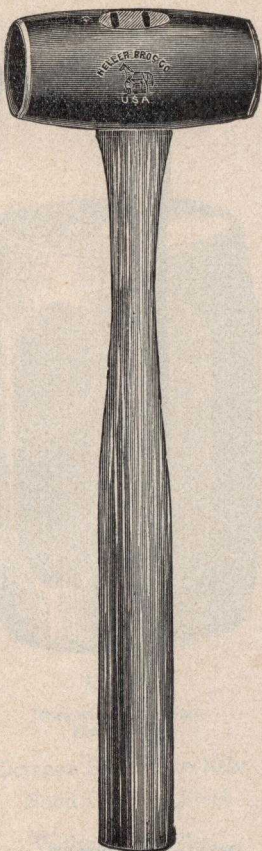
$\frac{1}{4}$ doz. in box.



No. 80.

**Carriage Ironers
Hammer.**

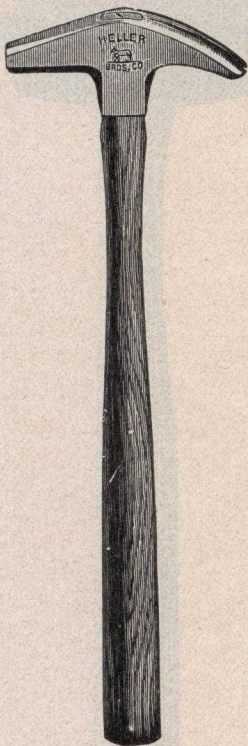
2¼, 2½, 2¾ and 3 lbs.
With Handles.
½ doz. in box.



No. 90.

Plating Hammer.

3½, 4 and 4½ lbs.
With Handles.
¼ doz. in box.

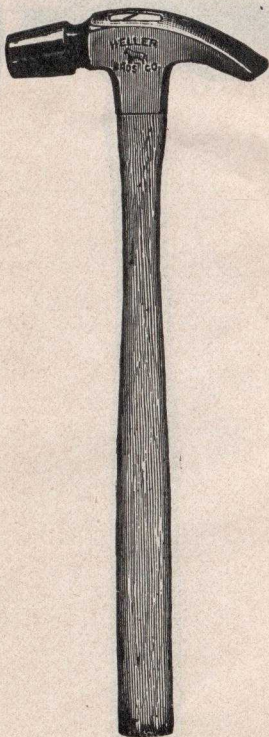


No. 64.

Driving Hammer.

11 to 20 oz.

With Handles.

 $\frac{1}{2}$ doz. in box.

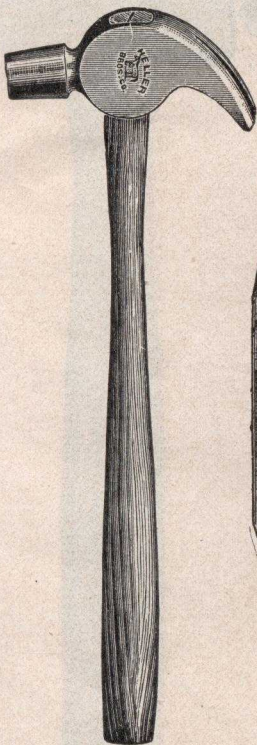
No. 65.

**Heller's Pattern
Driving Hammer.**

11 to 20 oz.

With Handles.

 $\frac{1}{2}$ doz. in box.

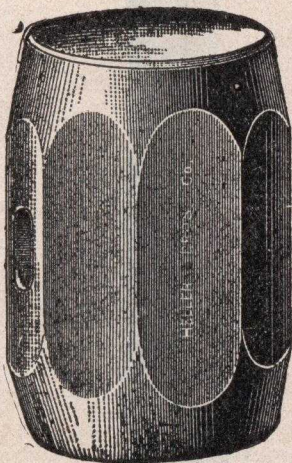


No. 69.

**Scotch Pattern
Driving Hammer.**

12to20oz. With Handles.

$\frac{1}{2}$ doz. in box.

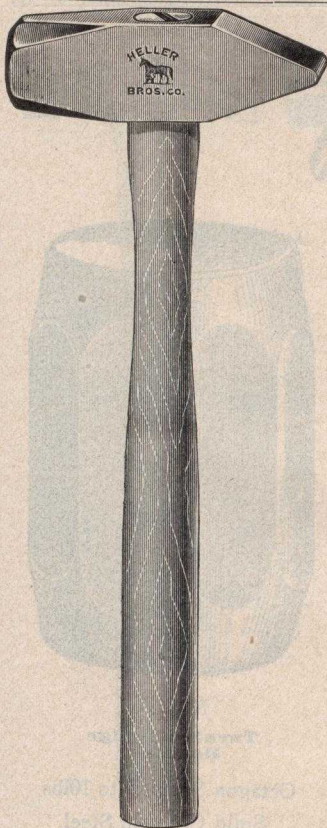


No. 66.

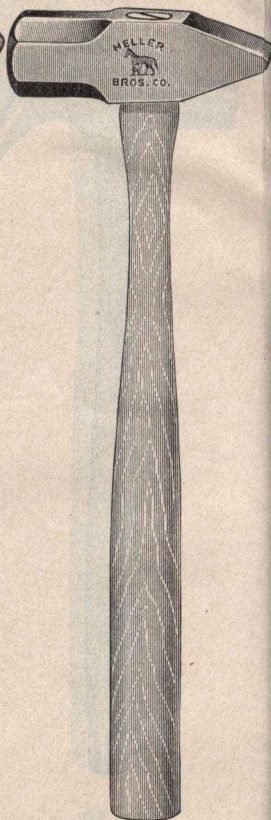
**Turning Sledge
Hammer.**

Octagon Shape 5 to 10lbs
Solid Crucible Steel.

Without Handles.

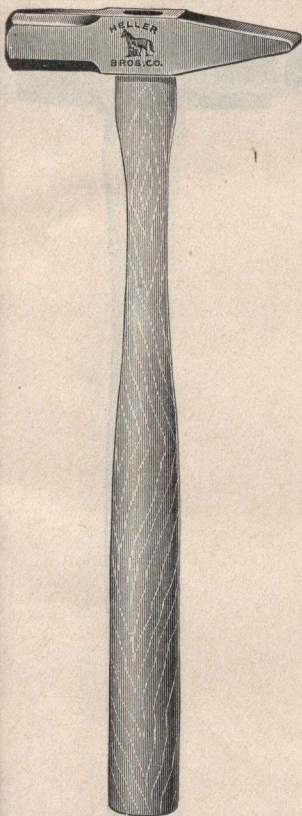


No. 300.

Blacksmith's Hand Hammer.1 $\frac{5}{8}$ to 4 $\frac{1}{2}$ lbs.Without weight
of Handles. $\frac{1}{4}$ doz. in box.

No. 200.

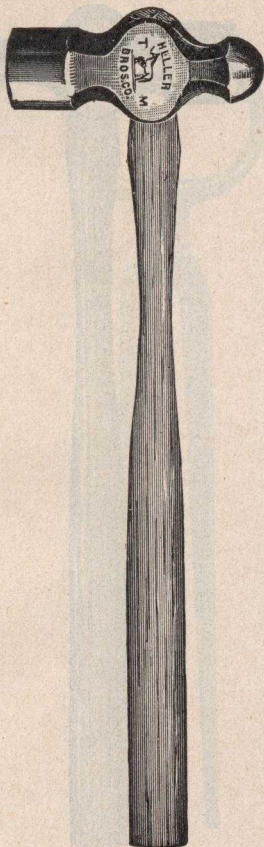
Engineer's or Plow Hammer.1 $\frac{5}{8}$ to 4 $\frac{1}{2}$ lbs.Without weight
of Handles. $\frac{1}{4}$ doz. in box.



No. 311.

Tinner's Riveting Hammer.

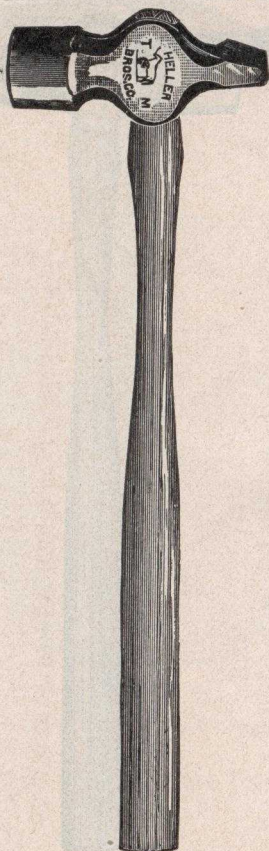
$\frac{1}{2}$ to $1\frac{1}{2}$ lbs.
Without weight
of Handles.
 $\frac{1}{2}$ doz. in box.



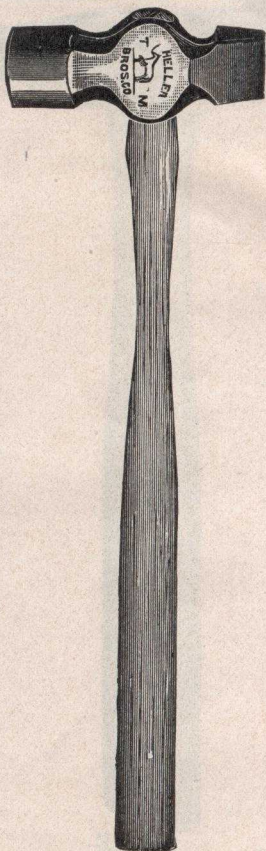
No. 800.

Ball Pein Hammer.

$\frac{1}{4}$ to 3 lbs.
Without weight
of Handles.
 $\frac{1}{2}$ doz. in box.

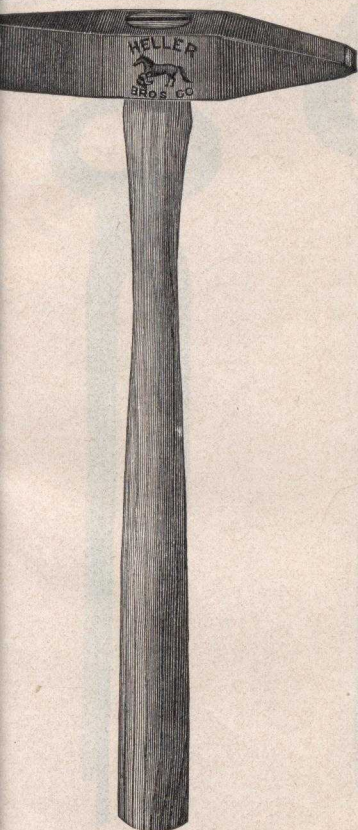


No. 900.

Cross Pein Hammer. $\frac{1}{4}$ to 3 lbs.Without weight
of Handles. $\frac{1}{2}$ doz. in box.

No. 1000.

Straight Pein Hammer $\frac{1}{4}$ to 3 lbs.Without weight
of Handles. $\frac{1}{2}$ doz. in box.



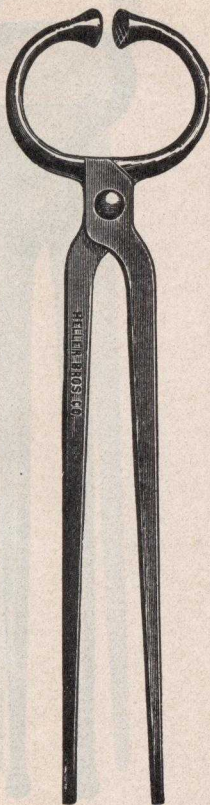
No. 71.

Scaling Hammer.

1 lb.

Without weight
of Handles.

½ doz. in box.

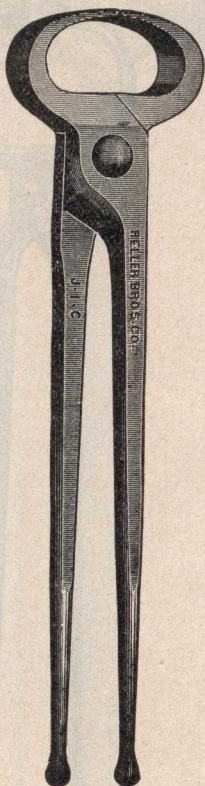


No. 27.

15-Inch Hoof Tester.

Nickel-plated.

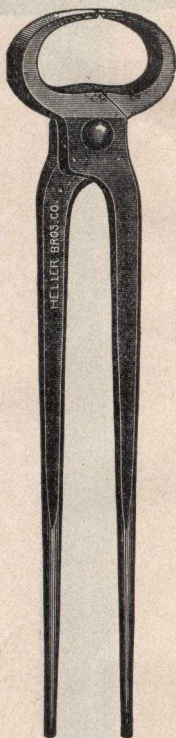
½ doz. in box.



No. 20.

Pincer.

13, 14 and 16 inch.

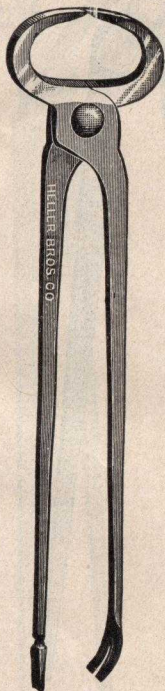
 $\frac{1}{4}$ doz. in box.

No. 21.

Pincer.

10 and 12 inch.

 $\frac{1}{2}$ doz. in box.

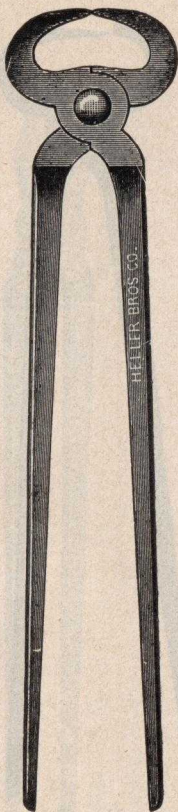


No. 22.

10-Inch Pincer.

With Screw Driver
and Tack Puller.

½ doz. in box.

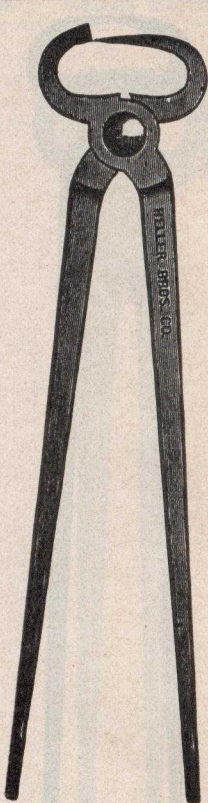


No. 24.

Cutting Nipper.

8, 10, 12 and 14 inch.

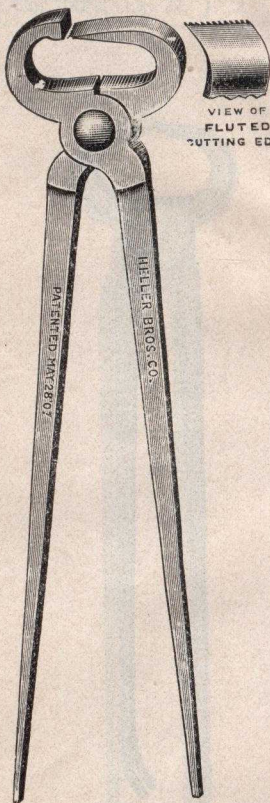
½ doz. in box.



No. 23.

Hoof Parer.

12 and 14 inch.

 $\frac{1}{2}$ doz. in box.VIEW OF
FLUTED
CUTTING EDGE

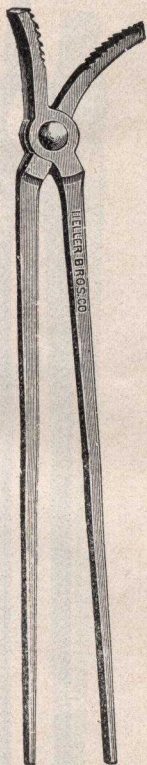
No. 23B.

**Fluted Jaw Hoof
Parer.**

12 and 14 inch.

The Patented Fluted cutting edge on this Parer makes the cutting much easier than with any of the old style Parers

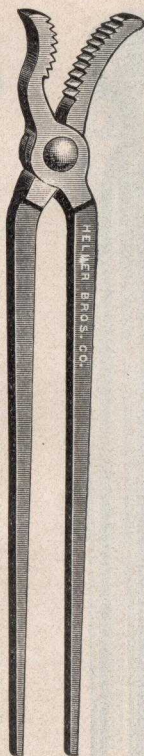
 $\frac{1}{2}$ doz. in box.



No. 26.

14-Inch Clincher.

$\frac{1}{2}$ doz. in box.



No. 28.

**New Pattern
14-Inch Clincher.**

$\frac{1}{2}$ doz. in box.



No. 40.

Farriers' Tong.Made in heavy
or light weights.

12 to 18 inches.



No. 41.

Blacksmiths'**Straight Lip
Tongs.**

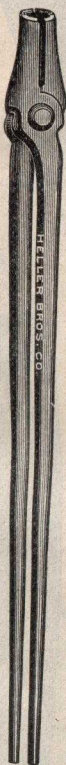
12 to 30 inches.



No. 42.

Blacksmiths'**Pick-up Tongs.**

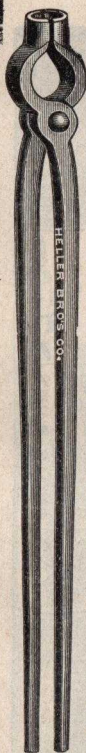
18, 20 & 24 inches.



No. 43.

**Blacksmiths'
V-Shape Tongs.**

16 to 30 inches.



No. 44.

**Blacksmiths'
Curved Lip
Fluted Jaw
Tongs.**

16 to 30 inches.



No. 45.

**18-Inch Brazing
Tongs.**



No. 54.

4-Inch Farriers' Round Knife File.

1 doz. in box.

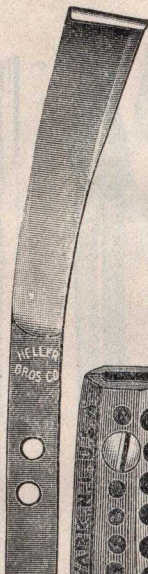


No. 55.

8-Inch Farriers' Knife Stone.

1 doz. in box.

Nos. 54 and 55 are made especially to sharpen the inner surface of the curved end of blade in farriers' knife.



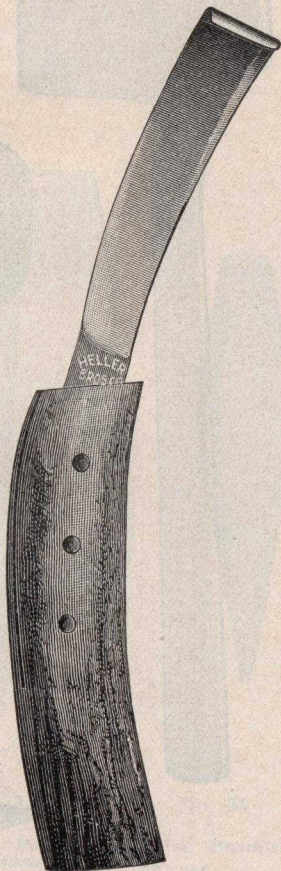
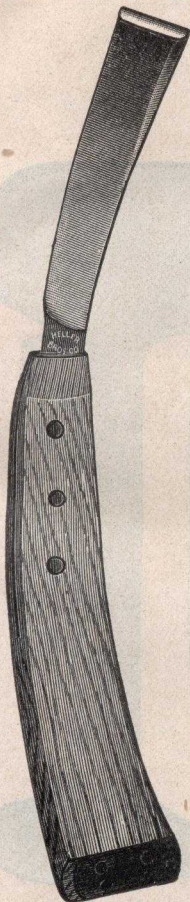
No. 52.

Adjustable Iron Handle Knife.

$\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$
and 1 inch blades.

1 doz. in box.





No. 50.

No. 51.

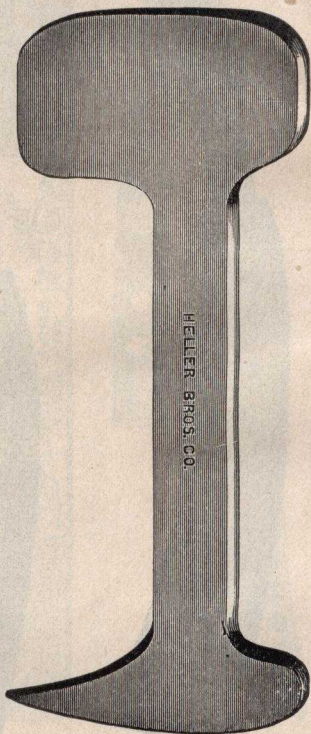
Wood Handle Knife. Bone Handle Knife.

Made with long or short blades, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$,
 $\frac{7}{8}$ and 1 inch blades.

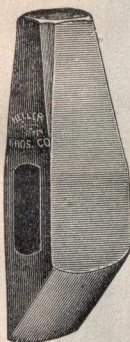
1 doz. in box.



No. 35.
Sole Knife.
8 to 8½ inch long.
1 doz. in box.



No. 39.
Buffer.
5½ to 6 inch long.
1 doz. in box.

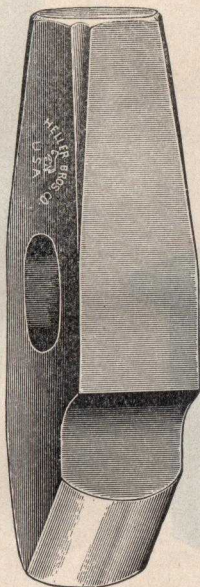


No. 33.

Creaser.

$\frac{3}{4}$, $\frac{7}{8}$, 1 and $1\frac{1}{8}$ inch.

1 doz. in box.



No. 33 A.

Scotch Pattern Creaser.

$\frac{7}{8}$, 1, $1\frac{1}{8}$ and $1\frac{1}{4}$ inch.

$\frac{1}{2}$ doz. in box.

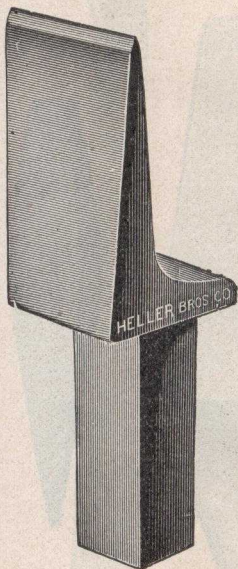


No. 34.

Fore Punch.

4 to $4\frac{1}{2}$ inch long.

1 doz. in box.



No. 31.

**Farriers' Straight
Hardie.**

$\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$ and
 $1\frac{1}{4}$ in. Shanks.
 $\frac{1}{2}$ doz. in box.



No. 32.

**Farriers' Half Round
Hardie.**

$\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$ and
 $1\frac{1}{4}$ in. Shanks.
 $\frac{1}{2}$ doz. in box.



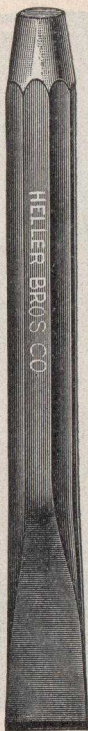
No. 30.

12-Inch Pritchel.

$\frac{5}{8}$ inch Octagon.

Weight 1 lb.

1 doz. in box.

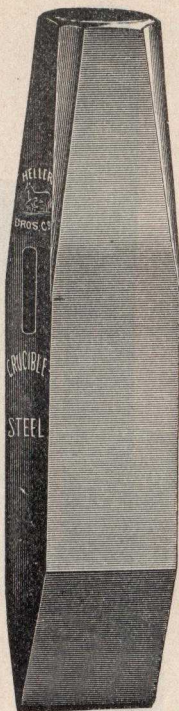


No. 94.

Hand Cold Chisel.

Sizes and approximate weights.

| Inches | Pounds |
|---------------|----------------|
| $\frac{1}{4}$ | $\frac{1}{8}$ |
| $\frac{3}{8}$ | $\frac{1}{4}$ |
| $\frac{1}{2}$ | $\frac{1}{2}$ |
| $\frac{5}{8}$ | $\frac{3}{4}$ |
| $\frac{3}{4}$ | $1\frac{1}{4}$ |
| $\frac{7}{8}$ | $1\frac{1}{2}$ |
| 1 | $1\frac{3}{4}$ |

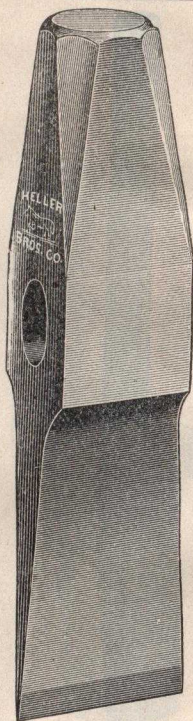


No. 95.

Blacksmiths' Cold Chisel.

Sizes and approximate weights.

| Inches | Pounds |
|----------------|----------------|
| $1\frac{1}{8}$ | $1\frac{3}{4}$ |
| $1\frac{1}{4}$ | $1\frac{3}{4}$ |
| $1\frac{3}{8}$ | $2\frac{1}{4}$ |
| $1\frac{1}{2}$ | $2\frac{3}{4}$ |
| $1\frac{5}{8}$ | 3 |



No. 96.

Blacksmiths' Hot Chisel.

| Inches | Pounds |
|----------------|----------------|
| $1\frac{1}{8}$ | $1\frac{1}{2}$ |
| $1\frac{1}{4}$ | $1\frac{1}{2}$ |
| $1\frac{3}{8}$ | $1\frac{3}{4}$ |
| $1\frac{1}{2}$ | $1\frac{3}{4}$ |
| $1\frac{5}{8}$ | 2 |
| $1\frac{3}{4}$ | 2 |
| $1\frac{7}{8}$ | $2\frac{1}{2}$ |
| 2 | $2\frac{1}{2}$ |



No. 98.

**Blacksmiths'
Round Punch.**

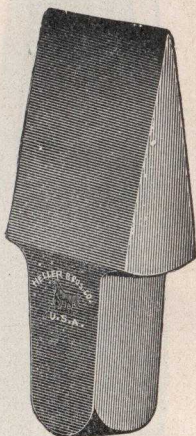


No. 99.

**Blacksmiths'
Square Punch.**

Sizes and approximate weights.

| Inches | Pounds | Inches | Pounds |
|---------------|----------------|---------------|----------------|
| $\frac{3}{8}$ | $1\frac{3}{4}$ | $\frac{3}{8}$ | $1\frac{3}{4}$ |
| $\frac{1}{2}$ | $2\frac{1}{4}$ | $\frac{1}{2}$ | $2\frac{1}{4}$ |
| $\frac{5}{8}$ | $2\frac{1}{2}$ | $\frac{5}{8}$ | $2\frac{1}{2}$ |
| $\frac{3}{4}$ | $2\frac{1}{2}$ | $\frac{3}{4}$ | $2\frac{1}{2}$ |
| $\frac{7}{8}$ | $2\frac{3}{4}$ | $\frac{7}{8}$ | $2\frac{3}{4}$ |
| 1 | $2\frac{3}{4}$ | 1 | $2\frac{3}{4}$ |

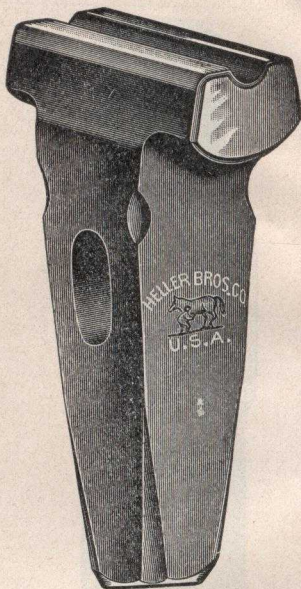


No. 97.

**Blacksmiths'
Straight Hardie.**

Size of shanks and approximate weights.

| Inches | Lbs. |
|----------------|----------------|
| $\frac{3}{4}$ | 1 |
| $\frac{7}{8}$ | $1\frac{1}{4}$ |
| 1 | $1\frac{1}{2}$ |
| $1\frac{1}{8}$ | $1\frac{3}{4}$ |

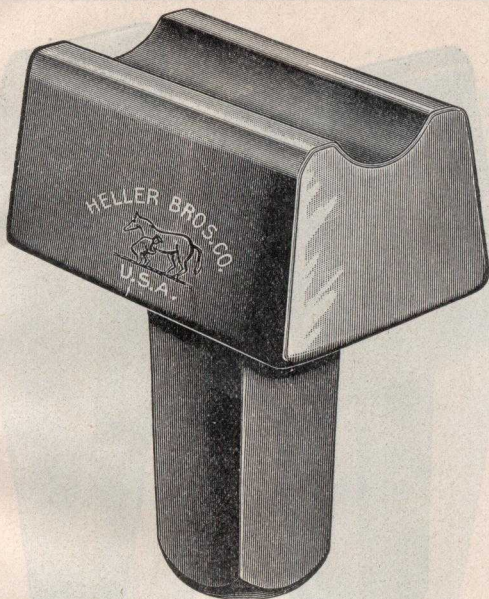


No. 101.

Top Swage.

Sizes and approximate
Weights.

| Inches | Lbs. | Inches | Lbs. |
|----------------|----------------|----------------|----------------|
| $\frac{1}{4}$ | $1\frac{7}{8}$ | $1\frac{7}{8}$ | $3\frac{3}{4}$ |
| $\frac{3}{8}$ | $1\frac{7}{8}$ | 2 | $3\frac{3}{4}$ |
| $\frac{1}{2}$ | $2\frac{7}{8}$ | $2\frac{1}{8}$ | 4 |
| $\frac{5}{8}$ | $2\frac{7}{8}$ | $2\frac{1}{4}$ | 4 |
| $\frac{3}{4}$ | 3 | $2\frac{3}{8}$ | 4 |
| $\frac{7}{8}$ | 3 | $2\frac{1}{2}$ | $4\frac{1}{4}$ |
| 1 | 3 | $2\frac{5}{8}$ | $4\frac{1}{4}$ |
| $1\frac{1}{8}$ | $3\frac{1}{4}$ | $2\frac{3}{4}$ | $4\frac{1}{4}$ |
| $1\frac{1}{4}$ | $3\frac{1}{4}$ | $2\frac{7}{8}$ | 5 |
| $1\frac{3}{8}$ | $3\frac{1}{4}$ | 3 | 5 |
| $1\frac{1}{2}$ | $3\frac{1}{4}$ | $3\frac{1}{8}$ | 5 |
| $1\frac{5}{8}$ | $3\frac{3}{4}$ | $3\frac{1}{4}$ | $5\frac{1}{4}$ |
| $1\frac{3}{4}$ | $3\frac{3}{4}$ | $3\frac{1}{2}$ | $5\frac{1}{4}$ |



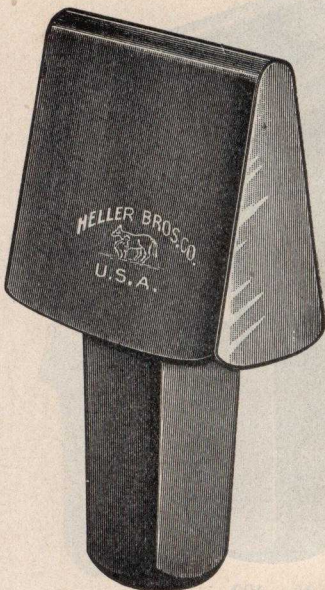
No. 100.

Bottom Swage.

Shanks for 1 inch Anvil Hole.

Sizes and approximate weights.

| Inches | Pounds | Inches | Pounds |
|----------------|----------------|----------------|-----------------|
| $\frac{1}{4}$ | 2 | 2 | $51\frac{1}{2}$ |
| $\frac{3}{8}$ | 2 | $2\frac{1}{8}$ | $51\frac{1}{2}$ |
| $\frac{1}{2}$ | $2\frac{1}{4}$ | $2\frac{1}{4}$ | $53\frac{3}{4}$ |
| $\frac{5}{8}$ | $2\frac{1}{4}$ | $2\frac{3}{8}$ | $53\frac{3}{4}$ |
| $\frac{3}{4}$ | $2\frac{1}{4}$ | $2\frac{1}{2}$ | $53\frac{3}{4}$ |
| $\frac{7}{8}$ | $2\frac{1}{4}$ | $2\frac{5}{8}$ | 6 |
| 1 | $2\frac{1}{4}$ | $2\frac{3}{4}$ | 6 |
| $1\frac{1}{8}$ | $2\frac{3}{4}$ | $2\frac{7}{8}$ | 6 |
| $1\frac{1}{4}$ | $2\frac{3}{4}$ | 3 | 6 |
| $1\frac{3}{8}$ | $2\frac{3}{4}$ | $3\frac{1}{8}$ | 6 |
| $1\frac{1}{2}$ | $2\frac{3}{4}$ | $3\frac{1}{4}$ | 8 |
| $1\frac{5}{8}$ | $4\frac{1}{2}$ | $3\frac{3}{8}$ | 8 |
| $1\frac{3}{4}$ | $4\frac{1}{2}$ | $3\frac{1}{2}$ | 8 |
| $1\frac{7}{8}$ | $5\frac{1}{2}$ | | |



No. 102.

Bottom Fuller.

Shanks for 1 inch
Anvil Hole.

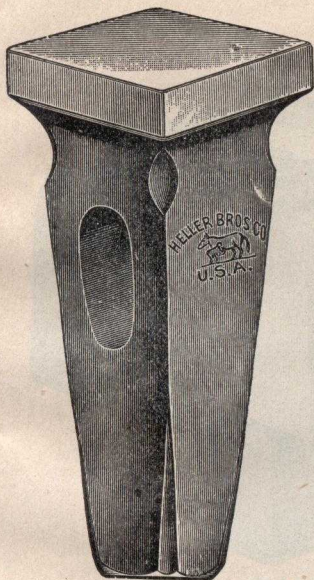


No. 103.

Top Fuller.

Sizes and approximate weights.

| Inches | Lbs. | Inches | Lbs. | Inches | Lbs. | Inches | Lbs. |
|----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|-----------------|
| $\frac{1}{4}$ | 2 | $1\frac{1}{2}$ | $31\frac{1}{2}$ | $\frac{1}{4}$ | 2 | $15\frac{1}{8}$ | $31\frac{1}{2}$ |
| $\frac{3}{8}$ | 2 | $1\frac{5}{8}$ | $31\frac{1}{2}$ | $\frac{3}{8}$ | 2 | $13\frac{1}{4}$ | $41\frac{1}{4}$ |
| $\frac{1}{2}$ | $2\frac{1}{4}$ | $1\frac{3}{4}$ | $33\frac{1}{4}$ | $\frac{1}{2}$ | $2\frac{1}{4}$ | $1\frac{7}{8}$ | $41\frac{1}{4}$ |
| $\frac{5}{8}$ | $2\frac{1}{2}$ | $1\frac{7}{8}$ | $33\frac{1}{4}$ | $\frac{5}{8}$ | $2\frac{1}{4}$ | 2 | $41\frac{1}{2}$ |
| $\frac{3}{4}$ | $2\frac{1}{2}$ | 2 | $41\frac{1}{4}$ | $\frac{3}{4}$ | $2\frac{1}{4}$ | $2\frac{1}{8}$ | 5 |
| $\frac{7}{8}$ | $2\frac{1}{2}$ | $2\frac{1}{8}$ | $41\frac{1}{4}$ | $\frac{7}{8}$ | $2\frac{1}{2}$ | $2\frac{1}{4}$ | $51\frac{1}{2}$ |
| 1 | 3 | $2\frac{1}{4}$ | $41\frac{1}{4}$ | 1 | $2\frac{1}{2}$ | $2\frac{3}{8}$ | $51\frac{1}{2}$ |
| $1\frac{1}{8}$ | 3 | $2\frac{3}{8}$ | $41\frac{1}{2}$ | $1\frac{1}{8}$ | $3\frac{1}{4}$ | $2\frac{1}{2}$ | $61\frac{1}{2}$ |
| $1\frac{1}{4}$ | 3 | $2\frac{1}{2}$ | $43\frac{1}{4}$ | $1\frac{1}{4}$ | $3\frac{1}{4}$ | $2\frac{3}{4}$ | $61\frac{1}{2}$ |
| $1\frac{3}{8}$ | $3\frac{1}{2}$ | | | $1\frac{3}{8}$ | $3\frac{1}{4}$ | $2\frac{7}{8}$ | 7 |
| | | | | $1\frac{1}{2}$ | $3\frac{1}{2}$ | 3 | 7 |



No. 104.

Square Flatter.

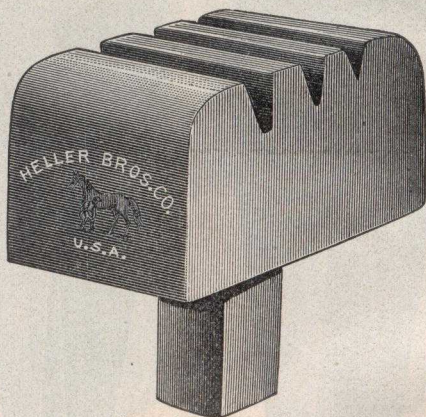


No. 105.

Set Hammer.

Sizes and approximate weights.

| Inches | Lbs. | Inches | Lbs. | Inches | Pounds |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1 | 1 $\frac{1}{4}$ | 2 $\frac{3}{8}$ | 2 $\frac{1}{4}$ | 1 | 1 $\frac{1}{4}$ |
| 1 $\frac{1}{8}$ | 1 $\frac{1}{4}$ | 2 $\frac{1}{2}$ | 2 $\frac{3}{4}$ | 1 $\frac{1}{8}$ | 1 $\frac{1}{4}$ |
| 1 $\frac{1}{4}$ | 1 $\frac{1}{4}$ | 2 $\frac{5}{8}$ | 2 $\frac{3}{4}$ | 1 $\frac{1}{4}$ | 2 |
| 1 $\frac{3}{8}$ | 1 $\frac{1}{4}$ | 2 $\frac{3}{4}$ | 2 $\frac{3}{4}$ | 1 $\frac{3}{8}$ | 2 |
| 1 $\frac{1}{2}$ | 1 $\frac{1}{4}$ | 2 $\frac{7}{8}$ | 2 $\frac{3}{4}$ | 1 $\frac{1}{2}$ | 2 $\frac{3}{4}$ |
| 1 $\frac{5}{8}$ | 1 $\frac{3}{4}$ | 3 | 4 $\frac{1}{2}$ | 1 $\frac{5}{8}$ | 2 $\frac{3}{4}$ |
| 1 $\frac{3}{4}$ | 1 $\frac{3}{4}$ | 3 $\frac{1}{8}$ | 4 $\frac{1}{2}$ | 1 $\frac{3}{4}$ | 3 |
| 1 $\frac{7}{8}$ | 2 | 3 $\frac{1}{4}$ | 5 $\frac{1}{2}$ | 1 $\frac{7}{8}$ | 3 |
| 2 | 2 | 3 $\frac{3}{8}$ | 5 $\frac{1}{2}$ | 2 | 4 |
| 2 $\frac{1}{8}$ | 2 $\frac{1}{4}$ | 3 $\frac{1}{2}$ | 6 | | |
| 2 $\frac{1}{4}$ | 2 $\frac{1}{4}$ | | | | |



No. 106.

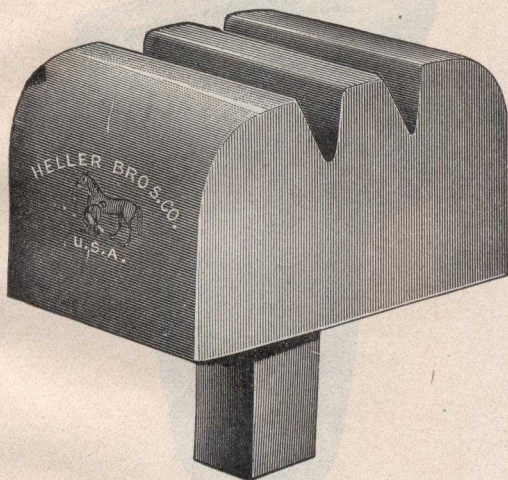
Small Toe Calk Welding Die

For

Nos. 0, 1, 2 and 3 Toe Calks.

Shanks for 1 inch Anvil Hole.

Approximate weight $35\frac{1}{8}$ lbs.



No. 107.

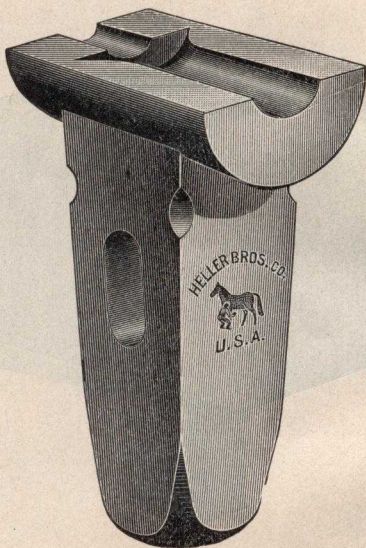
Large Toe Calk Welding Die.

For

Nos. 3, 4, 5 and 6 Toe Calks.

Shanks for 1 inch Anvil Hole.

Approximate weight $6\frac{1}{4}$ lbs.

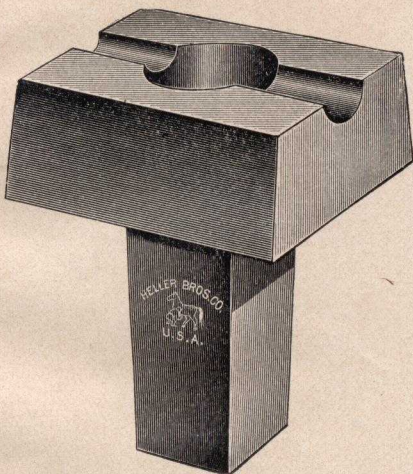


No. 108.

Top Collar Swage.

Sizes and approximate weights.

| Inches. | Top lbs. | Bottom lbs. |
|----------------|-----------------|-----------------|
| 7-16 | $27\frac{7}{8}$ | $21\frac{1}{4}$ |
| $1\frac{1}{2}$ | $27\frac{7}{8}$ | $21\frac{1}{4}$ |
| $\frac{5}{8}$ | $27\frac{7}{8}$ | $21\frac{1}{4}$ |
| $\frac{3}{4}$ | 3 | $21\frac{1}{4}$ |



No. 109.

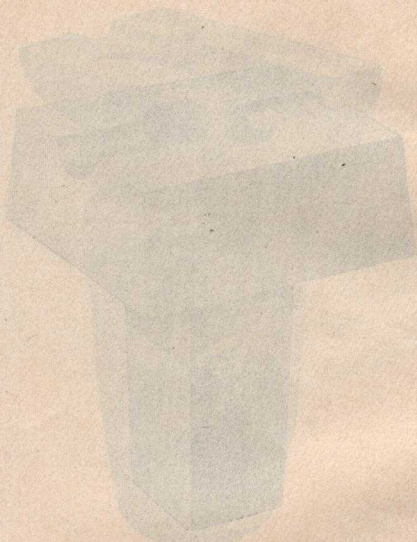
Bottom Ball Swage.

Shanks for 1 inch Anvil Hole.

Sizes and approximate weights.

| Inches | Top lbs. | Bottom lbs. |
|----------------|----------------|----------------|
| 7-16 | $2\frac{7}{8}$ | $2\frac{1}{4}$ |
| $1\frac{1}{2}$ | $2\frac{7}{8}$ | $2\frac{1}{4}$ |
| $\frac{5}{8}$ | $2\frac{7}{8}$ | $2\frac{1}{4}$ |
| $\frac{3}{4}$ | 3 | $2\frac{1}{4}$ |

MEMORANDUM.



No. 100

Bottom Ball Swage

Swage called out

Shanks for 1 inch Ball Head

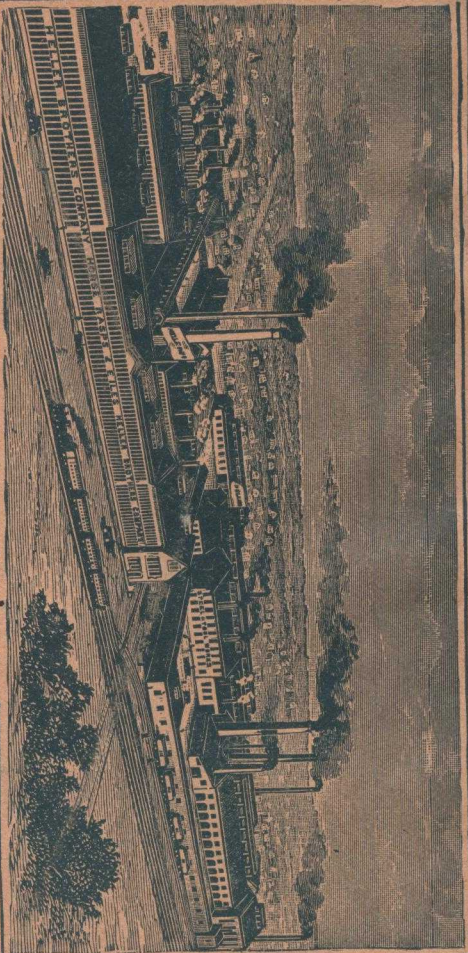
Shanks and approximate weights

| Weight | Shank | Head | Shank | Head |
|--------|-------|------|-------|------|
| 100 | 1.00 | 1.00 | 1.00 | 1.00 |
| 100 | 1.00 | 1.00 | 1.00 | 1.00 |
| 100 | 1.00 | 1.00 | 1.00 | 1.00 |
| 100 | 1.00 | 1.00 | 1.00 | 1.00 |

MEMORANDUM.

MEMORANDUM.





Factory, Newark, N. J., U. S. A.